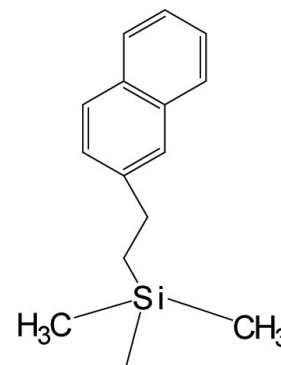


Tocopherols - COSMOSIL π NAP

COSMOSIL π NAP provides greater performance in separating positional isomers and other closely related compounds which are difficult to analyze with C_{18} .

Packing Material	π NAP	2.5 π NAP
Silica Gel	High Purity Porous Spherical Silica	
Average Particle Size	5 μ m	2.5 μ m
Average Pore Size	approx. 120 Å	approx. 130 Å
Specific Surface Area	approx. 300 m ² /g	approx. 330 m ² /g
Stationary Phase	Naphtylethyl Group	
Bonding Type	Monomeric	
Main Interaction	Hydrophobic Interaction π - π Interaction	
End Capping Treatment	Near-perfect Treatment	

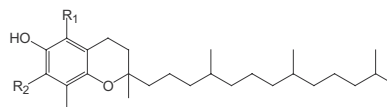
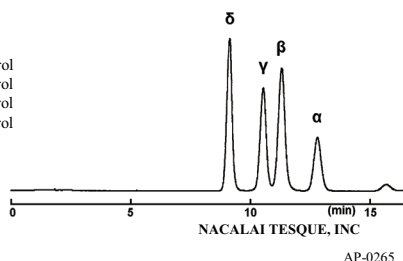


■ COSMOSIL π NAP

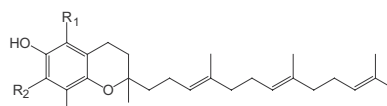
COSMOSIL Application Data

Column: π NAP
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV295nm

Sample: α -Tocopherol
 β -Tocopherol
 γ -Tocopherol
 δ -Tocopherol



Tocopherol	R ₁	R ₂
α -Tocopherol	CH ₃	CH ₃
β -Tocopherol	CH ₃	H
γ -Tocopherol	H	CH ₃
δ -Tocopherol	H	H

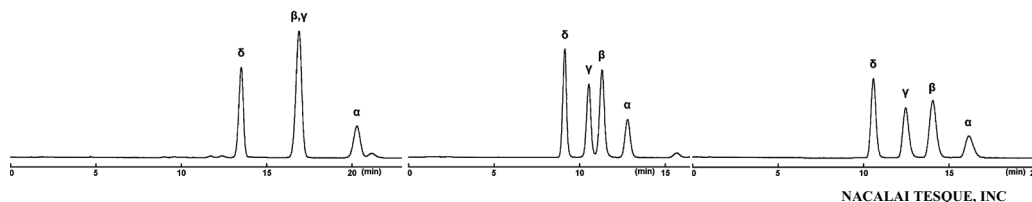


Tocotrienol	R ₁	R ₂
α -Tocotrienol	CH ₃	CH ₃
β -Tocotrienol	CH ₃	H
γ -Tocotrienol	H	CH ₃
δ -Tocotrienol	H	H

COSMOSIL Application Data

Column: $5C_{18}$ -MS-II π NAP 5PYE
 Column size: 4.6mm I.D.-150mm
 Mobile phase: $5C_{18}$ -MS-II Methanol/ H₂O = 95/5
 π NAP Methanol/ H₂O = 90/10
 5PYE Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV295nm

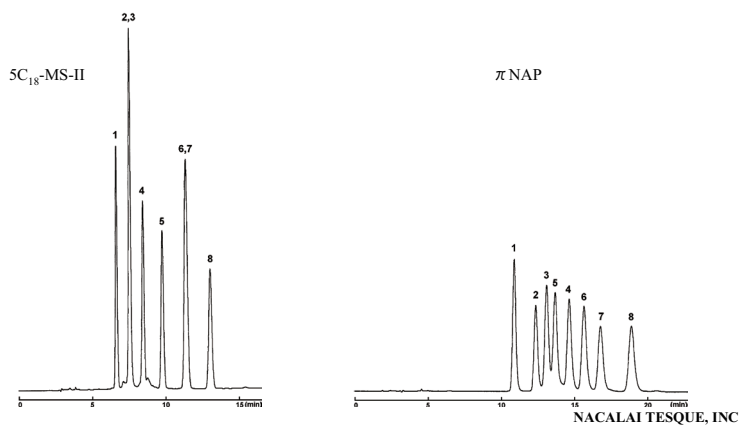
Sample: α -Tocopherol
 β -Tocopherol
 γ -Tocopherol
 δ -Tocopherol



COSMOSIL Application Data

Column: 4.6mmI.D.-250mm
 Column size: 5C₁₈-MS-II
 Mobile phase: π NAP Methanol / H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV295nm

Sample: 1; δ-Tocotrienol
 2; γ-Tocotrienol
 3; β-Tocotrienol
 4; α-Tocotrienol
 5; δ-Tocopherol
 6; γ-Tocopherol
 7; β-Tocopherol
 8; α-Tocopherol

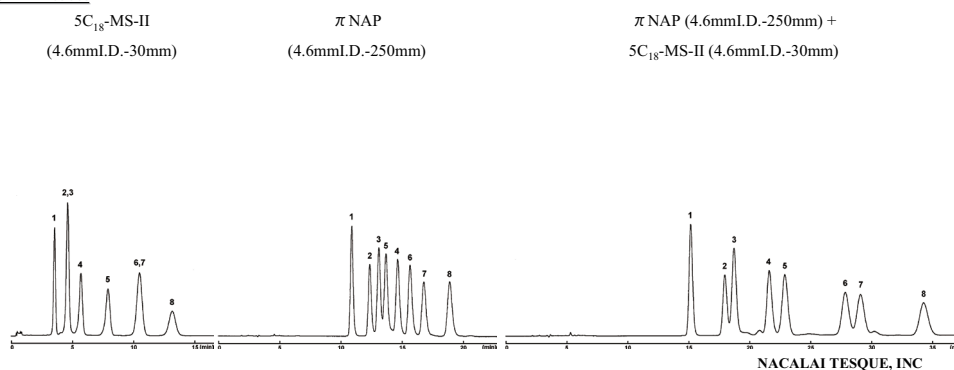


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COSMOSIL Application Data

Column: 4.6mmI.D.-30mm
 Column size: 5C₁₈-MS-II
 Mobile phase: Methanol / H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV295nm

Sample: 1; δ-Tocotrienol
 2; γ-Tocotrienol
 3; β-Tocotrienol
 4; α-Tocotrienol
 5; δ-Tocopherol
 6; γ-Tocopherol
 7; β-Tocopherol
 8; α-Tocopherol



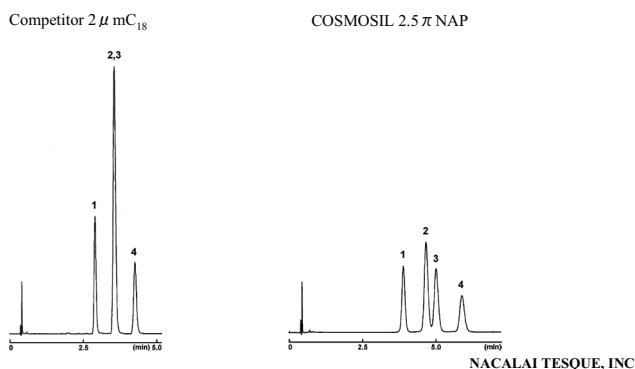
NACALAI TESQUE, INC
 AP-1156

■ COSMOSIL 2.5πNAP

COSMOSIL Application Data

Column: 3.0mmI.D.-75mm
 Column size: Competitor 2 μ mC₁₈
 Mobile phase: 2.5 π NAP Methanol / H₂O = 95/5
 2.5 π NAP Methanol / H₂O = 85/15
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV295nm

Sample: 1; δ-Tocopherol
 2; γ-Tocopherol
 3; β-Tocopherol
 4; α-Tocopherol



NACALAI TESQUE, INC
 AP-1151

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 The quality for certainty.



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